



25

SEQUENCE LISTING

7
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(1) GENERAL INFORMATION:

- (i) APPLICANT: SHEPARD, H. M.
KAN, NANCY
- (ii) TITLE OF INVENTION: GENE THERAPY BY RETROVIRAL VECTOR WITH
TUMOR SUPPRESSIVE GENE
- (iii) NUMBER OF SEQUENCES: 2
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: TOWNSEND AND TOWNSEND AND CREW LLP
 - (B) STREET: TWO EMBARCADERO CENTER, 8TH FLOOR
 - (C) CITY: SAN FRANCISCO
 - (D) STATE: CA
 - (E) COUNTRY: U.S.A.
 - (F) ZIP: 94111-3834
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/403,797
 - (B) FILING DATE: 04-DEC-1995
 - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: PCT/US95/08844
 - (B) FILING DATE: 17-SEP-1993
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: FITTS, RENEE A
 - (B) REGISTRATION NUMBER: 35,136
 - (C) REFERENCE/DOCKET NUMBER: 16930-000600
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (415) 326-2400
 - (B) TELEFAX: (415) 576-0300

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 7 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: not relevant
 - (D) TOPOLOGY: not relevant
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
Ser His Arg Pro Gly Ser Arg
1 5

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: not relevant
- (D) TOPOLOGY: not relevant

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

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Leu Leu Gly Ser Gly Asp Thr Leu Arg Ser Gly Trp Glu Arg Ala Phe
1           5           10           15
His Asp Gly Asp Thr Leu Pro Trp Ile Gly Ser Gln Thr Ala Phe Arg
          20           25           30
Val Thr Ala Met Glu Glu Pro Gln Ser Asp Pro Ser Val Glu Pro Pro
          35           40           45
Leu Ser Gln Glu Thr Phe Ser Asp Leu Trp Lys Leu Leu Pro Glu Asn
          50           55           60
Asn Val Leu Ser Pro Leu Pro Ser Gln Ala Met Asp Asp Leu Met Leu
          65           70           75           80
Ser Pro Asp Asp Ile Glu Gln Trp Phe Thr Glu Asp Pro Gly Pro Asp
          85           90           95
Glu Ala Pro Arg Met Pro Glu Ala Ala Pro Pro Val Ala Pro Ala Pro
          100          105          110
Ala Ala Pro Thr Pro Ala Ala Pro Ala Pro Ala Pro Ser Trp Pro Leu
          115          120          125
Ser Ser Ser Val Pro Ser Gln Lys Thr Tyr Gln Gly Ser Tyr Gly Phe
          130          135          140
Arg Leu Gly Phe Leu His Ser Gly Thr Ala Lys Ser Val Thr Cys Thr
          145          150          155          160
Tyr Ser Pro Ala Leu Asn Lys Met Phe Cys Gln Leu Ala Lys Thr Cys
          165          170          175
Pro Val Gln Leu Trp Val Asp Ser Thr Pro Pro Pro Gly Thr Arg Val
          180          185          190
Arg Ala Met Ala Ile Tyr Lys Gln Ser Gln His Met Thr Glu Val Val
          195          200          205
Arg Arg Cys Pro His His Glu Arg Cys Ser Asp Ser Asp Gly Leu Ala
          210          215          220
Pro Pro Gln His Leu Ile Arg Val Glu Gly Asn Leu Arg Val Glu Tyr
          225          230          235          240
Leu Asp Asp Arg Asn Thr Phe Arg His Ser Val Val Val Pro Tyr Glu
          245          250          255
Pro Pro Glu Val Gly Ser Asp Cys Thr Thr Ile His Tyr Asn Tyr Met
          260          265          270

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Cys	Asn	Ser	Ser	Cys	Met	Gly	Gly	Met	Asn	Arg	Arg	Pro	Ile	Leu	Thr
	275						280					285			
Ile	Ile	Thr	Leu	Glu	Asp	Ser	Ser	Gly	Asn	Leu	Leu	Gly	Arg	Asn	Ser
	290					295					300				
Phe	Glu	Val	Arg	Val	Cys	Ala	Cys	Pro	Gly	Arg	Asp	Arg	Arg	Thr	Glu
305					310					315					320
Glu	Glu	Asn	Leu	Arg	Lys	Lys	Gly	Glu	Pro	His	His	Glu	Leu	Pro	Pro
				325					330					335	
Gly	Ser	Thr	Lys	Arg	Ala	Leu	Pro	Asn	Asn	Thr	Ser	Ser	Ser	Pro	Gln
			340					345					350		
Pro	Lys	Lys	Lys	Pro	Leu	Asp	Gly	Glu	Tyr	Phe	Thr	Leu	Gln	Ile	Arg
	355						360					365			
Gly	Arg	Glu	Arg	Phe	Glu	Met	Phe	Arg	Glu	Leu	Asn	Glu	Ala	Leu	Glu
	370					375					380				
Leu	Lys	Asp	Ala	Gln	Ala	Gly	Lys	Glu	Pro	Gly	Gly	Ser	Arg	Ala	His
385					390					395					400
Ser	Ser	His	Leu	Lys	Ser	Lys	Lys	Gly	Gln	Ser	Thr	Ser	Arg	His	Lys
				405					410					415	
Lys	Leu	Met	Phe	Lys	Thr	Glu	Gly	Pro	Asp	Ser	Asp				
			420					425							